THE WESTERN FARMER AND GARDENER:

DEVOTED TO AGRICULTURE, HORTICULTURE AND RURAL ECONOMY.

Vol. III.] Cincinnati, February, 1842. [No. V.

Flora,

Whose portrait accompanies this, was imported into this country by the Ohio Company in 1834. Color Roan: was calved in April, 1834. Bred by Mr. A. L. Maynard, got by a son of young Albion, (15) d. (young Red Neck,) by Marton, g. d. (old Red Neck) by Palmsum (1302) g. g. d. by a bull of Mr. Parrington's.

Flora and her calf Powhattan were sold to Geo. Renick, Senior, at the Ohio Company Sale for $1205 00, but ultimately bought by M. L. Sullivant Esq., of Columbus for $1300, whose property she now is.

Agricultural Society of the United States.

A meeting of the frends of Agriculture from the different sections of the United States, was held pursuant to public notice, in the Hall of the House of Representatives at Washington, on the 15th of December, 1841, when,

On motion of the Hon. Dixon H. Lewis, of Alabama, the Hon. James M. Garnett, of Virginia, was appointed President of the meeting, and the Hon. D. H. Lewis of Alabama, Hon. Edmund Deberry, of North Carolina, Dr. James W. Thompson, of Delaware, Joseph Gales, Esq., of the District of Columbia, Benj. V. French, Esq., of Massachusetts and James T. Gifford Esq. of Illinois, were appointed Vice Presidents; and J. F. Callan, of the District of Columbia, and Robert E. Horner, of New Jersey, were appointed Secretaries.

The President, having very ably and pointedly addressed the Convention, appointed the following Committee to present the Constitution of the Society viz: Hon. H. L. Ellsworth, of D. C., Hon. D. H. Lewis, of Alabama, Hon. James A. Pearce, of Maryland, Hon. Zadock Casey, of Illinois, Hon. G. M. Kiem, of Pennsylvania, John Jones, Esq., of Delaware. Peter Thatcher, Esq., of Massachusetts, and C. F. Mercer, Esq., of Florida, who, after having retired for a few moments, reported the following Constitution, which was read and adopted;

The style of this society shall be "*The Agricultural Society of the United States.*" Its objects shall be to improve the condition of American husbandry, and from its central position to serve as a medium of communication and of action with other agricultural societies throughout the Union.

Article 1. This society shall consist of such members as shall, at the formation of the same, sign the Constitution, and pay to the treasurer two dollars, and one dollar annually thereafter as long as they shall continue members.

Art. 2. Any citizen of the United States may become a member of this Society by paying the fees required for membership.

Art. 3. Any agricultural society in the United States, shall become an auxiliry society upon paying to the treasurer the sum of ten dollars, upon application, and five dollars annually thereafter; and each auxiliary society shall receive no less than five printed copies of the annual proceedings of this society, and shall also be represented by such delegate or delegates as they may appoint to the annual meetings of this society, and on all questions to be decided by the society, such delegation shall be entitled to ten votes.

Art. 4. Any person paying to the treasurer ten dollars, shall receive a diploma of membership for life.

Art. 5. The officers of this society shall consist of one President, one Vice President from each State and Teritory, and one from the District of Columbia, a Recording Secretary, a Corresponding Secretary and Treasurer and a Board of Control, consisting of five members, three of whom shall constitute a quorum.

Art. 6. The President, and in his absence, one of the Vice Presidents, shall preside at all meetings of the society. By the concurrence of the Board of Control, he may call special meetings of the society, giving public notice thereof by advertisement, at least three weeks before said meeting. He shall draw all drafts on the treasurer for monies paid out, which drafts shall be countersigned by the Recording Secretary; and the treasurer shall at the next annual meeting make a full statement of all receipts and expenditures, setting forth as well the items as the amount thereof

Art. 7. The Vice Presidents of the States of Virginia, Maryland, Pennsylvania, and Delaware, and of the District of Columbia, shall be ex-officio, members of the Board of Control, provided no act shall be done by said Board without the presence of a quorum of the original Board.

Art. 8. The Recording Secretary shall keep a full record of all the proceedings of the Society, and supervise the publication of them as may be directed.

Art. 9. The Corresponding Secretary may be one of the five members constituting the Board of Control, and in addition to conducting all the correspondence of the Society, shall keep a record of all expenditures ordered by said Board, and, in short, perform for said Board all the purposes of a Secretary,

and shall receive such compensation therefor as said Board, with consent of the President, may allow.

Art. 10. The Board of Control shall consist of five members, living in, or at a convenient distance from this city, who shall perform all the executive duties necessary to the purposes of the Society, not specifically assigned to other officers. They shall avail themselves of all the means in their power to become acquainted with the agriculture of foreign countries, and through such aid as they may be able to receive from our diplomatic agents abroad, as well as our consuls, shall, if consistent with the pecuniary means of the Society, introduce from abroad whatever they may think materially calculated to improve the agriculture of this country, whether it consists of information as to new and improved modes of culture, seeds, plants additional articles of cultivation, agricultural implements, or domestic animals; the disposition of which shall be made at the first annual meeting of the Society.

Art. 11. The Board of Control shall also use the necessary means of having a large exhibition at each annual meeting, of improved Agricultural implements and machinery, with a full and public trial of the same; of improved stocks of all kinds, and particularly of inviting the exhibition of such animals as have taken premiums at other agricultural shows, with the view of testing the superiority of prize animals themselves; also of the different breeds of animals, for the purpose of comparing the advantages of each. They shall affix to such exhibitions such premiums as they shall adjudge suitable, appointing such judges as they may select, to award the same, which judges shall not only assign their preferences, but shall draw up a detailed report of their several examinations, setting forth fully a description of the articles or animals adjudged, and the grounds upon which their preferences are awarded.

Art. 12. It shall further be the duty of the Board of Control, when they think it expedient, to procure a model of such implements and machinery as may have received a premium, to be kept in some suitable and convenient place, selected as an agricultural repertory, for inspection of the public, and particularly the members of the Society.

Art. 13. The said Board may also award premiums for prize essays, to be read before the Society, for well conducted and well reported experiments in agriculture, having reference in the same to prevailing agricultural productions of the different sections of the Union.

Art. 14. The said Board shall give due notice by advertisement of the time and place of such exhibitions, the premiums to be awarded, and the committee by whom they are to be awarded, and for the expense attending the discharge of the duties herein imposed, they shall draw requisitions on the President, setting forth, severally, the items of expense, which requisitions shall be recorded by the Recording Secretary; and the President, if he approves the same, shall thereupon issue his draft on the Treasurer for the amount.

Art. 15. The said Board shall also be instructed to make efforts to obtain funds for the establisement of an agricultural school in the District of Columbia, and appurtenant thereto, a course of public lectures on Agriculture, Chemistry, Botany, Minerology, Geology and Etomology, as appropriate sciences to the great business of agriculture, which with the buildings and improvements thereon, shall in the language of Smithson, be set apart forever "as an establishment for the increase and diffusion of knowledge among men"

Art. 16. The Board of Control shall procure an appropriate seal for the Society, to be attached to diplomas or other documents or instruments which may be issued to honorary members or other persons, under the direction of the Society. They shall fill all vacancies that may occur by death, resignation or otherwise either in their own body, or the list of the officers, to continue until the next general meeting.

Art. 17. In further aid of the purpose of this society, the said Board shall invite some suitable person to establish an agricultural publication in this city, and shall also petition Congress for the incorporation of this society.

Art. 18. The first general meeting of this Society shall be in the city of Washington, on the first Wednesday in May next, and thereafter at such times as the Society may direct.

Art. 19. All moneys paid to the treasurer either for subscriptions or as donotions to the Society, shall be deposited to the Society's credit, in such bank or institution as the Board of Control may direct, and can only be withdrawn upon the requisition of the President or acting President, countersigned by the Secretary and Treasurer.

Art. 20. This Constitution shall be amended only by a vote of two thirds of all the members present at an annual meeting of the Society—but the Board of Control may, by the aid of the President, establish any needful bye-laws for the better order of the Society not incompatible with this Constitution—which bye-laws may at any time be amended by a majority of the Society present.

Art. 21. Elections for all officers of the Society shall be held by ballot at every general meeting thereof—but until an election at the general meeting in May next, the following persons shall be a committee to appoint the officers herein before mentioned, and to make publication of the same in ten days from this time.

On motion, J. S. Skinner, Esq., Hon. D. H. Lewis, and Hon. H. L. Ellsworth were

appointed a committee to wait upon the chairman and solicit a copy of his address for publication.

On motion of Mr. Torry, of Massachusetts it was

Resolved, That the Board of Control of the Society be instructed to present a petition to the present Congress of the United States to set apart the Smithsonian bequest for the purpose of carrying out the objects of the Society.

The Hon. Levi Woodbury, of New Hampshire, Hon. Lewis F. Linn, of Missouri, Hon. Wm. C. Rives, of Virginia, Hon. Wm. C. Johnson, of Maryland, Hon. D. H. Lewis of Alabama, Hon. John Hastings, of Ohio, Hon. H. L. Ellsworth, of the District of Columbia, John S. Skinner, Esq., of the District of Columbia, and J. F. Callan, of the District of Columbia, were appointed a committee to select the officers of the Society provided for in the Constitution, to serve until the regular election in May next.

On motion, it was

Ordered, That subscription papers be left with the Secretary of the Senate, the Clerk of the House of Representatives, the Librarian of Congress, and the Secretaries of this meeting, where persons desirous of becoming members may enrol their names.

Ordered, That the proceedings of this meeting be published in all the newspapers of the District.

And the Convention adjourned.

J. F. Callan, } *Secretaries.*
R. E. Horner, }

The Committee appointed by the Agricultural Society of the United States to select the officers of the Society to serve until the first general meeting and exhibition on the 4th day of May next, have met, and do hereby recommend and report the following gentlemen to fill the offices annexed to their respective names. The Recording Secretary is requested to publish the list, and give special information to each individual of his selection.

Levi Woodbury,
Chairman for the Committee.

President—James M. Garnett.
Corresponding Secretary—John S. Skinner.
Recording Secretary—John F. Callan.
Treasurer—Edward Dyer.
Board of Control—Levi Woodbury, Elisha Whittlesey, Alexander Hunter, John A. Smith, W. J. Stone.
Vice Presidents—Maine, George Evans; New Hampshire, Isaac Hill; Massachusetts, B. V. French; Connecticut, Eli Ives; R. Island, Gov. Fenner; Vermont, Wm. Jarvis; New York, C. N. Bement; New Jersey, C. S. Green; Pennsylvania, Geo. E. Kiem; Delaware, J. W. Thompson; Maryland Thos. Emory; Virginia, Edmund Ruffin; N. Carolina, Edmund Deberry; S. Carolina, Wade Hampton; Georgia, W. Lumpkin; Alabama, Dixon H. Lewis; Louisiana, Alex. Mouton; Arkansas, Archibald Yell; Tennessee, F. H. Gordon; Mississippi, M. W. Phillips; Kentucky, Chilton Allen; Missouri, Lewis F. Linn; Illinois, A. W. Snyder; Indiana, Solon Robinson; Michigan, Isaac E. Crarey; Ohio, John Hastings; District of Columbia, H. L. Ellsworth; Florida, R. W. Williams; Iowa, Timothy Davis; Wisconsin, Henry Dodge.

The Vice Presidents of Virginia, Maryland, District of Columbia, Pennsylvania, and Delaware, are ex-officio members of the Board of Control.

MEMORIAL,

Of John W. Gill, on the culture and manufacture of silk.

Gentlemen of the Senate and House of Representatives of the State of Ohio:

With much diffidence do I take the liberty of calling your attention to the following communication; but being the bearer of a petition addressed to your honors, from more than one hundred and forty of my immediate neighbors, (praying you to encourage the production and manufacture of silk, by giving a moderate bounty for eight or ter years,) is, I hope a sufficient apology for the liberty I have taken. The connection it has with a branch of industry, the success or failure of which, is of great and vital importance to the citizens of the United States generally, and to us in Ohio in particular, I feel the responsibility of giving publicity to facts and opinions that may have a tendency to influence the legislature to encourage, or any of my fellow citizens to embark in a branch of business that practical trial, after expending time and capital, should be found unproductive. The production and manufacture of silk in this country has been exciting much interest and inquiry in the United States for several years past, caused no doubt by the great quantity of silk *imported*, and the ruinous drain of coin, amounting to twenty millions of dollars annually, exported to pay for them; and also by the success of numerous experiments that have been made, proving clearly, that the business may be made a profitable branch of our farming and manufacturing operations, and give employment to our now unproductive population, viz: the aged, infirm, children, &c.

Influenced by much reflection on these subjects, and the great benefit that would accrue to my country, if they could be brought into practice and successful operation in a systematic manner, I concluded to devote a portion of my time and capital to a practical test of this business, which, for four years past, I have pursued as per annexed scrawl.

In May, 1838, I purchased and planted one

thousand multicaulis, and three thousand Italian mulberry trees, at a cost of about $400. That season fed a few, say ten thousand worms, by way of experiment, and was very successful. Let the roots from multicaulis stand out during the winter, and they were generally killed by the frost. In April and May, 1839, purchased and planted twelve hundred multicaulis, and two thousand Florence, at a cost of about $800. These trees increased ten fold. At the same time I contracted for the production of one acre more, which produced three thousand two hundred multicaulis, at a cost of $460. At the same time I contracted with John Fox, senior, and three of his family, all experienced and skillful machinists and silk manufactures from London, for one year, at a cost of $720, and during the same year, they, with other assistance, constructed a number of looms, harness, and other machinery, and manufactured about $1,000 worth of silk velvets, hat plush, &c., from cocoons of my raising, and purchases made from this state and Pennsylvania. I had but partial success raising cocoons that season, owing to the loss of two hundred thousand fine, healthy worms, after their fourth moulting, caused by the neglect of a person to properly ventilate the room and feed them during a few days of my abscence. In November 1839, I purchased twelve thousand two hundred multicaulis trees, at a cost of about $600, making in all, at that time, forty-two thousand six hundred trees which cost $2,260; from which I sold four thousand six hundred for $1,460, leaving on hand thirty-eight thousand trees, at a cost of $800; and by September, 1841, they had multiplied to about one hundred and fifty thousand in number, and covered thirty acres of ground. During 1839, '40, and '41, I constructed three cocooneries worth $1,200, and a factory three stories high, forty by sixty feet, worth $1,100. Cash value of engine and machinery, September 1, 1841, $3,200.

Since then I have added much additional machinery. During the past year I was completely successful in my feeding operations, and produced eighty bushels of good cocoons, and had foliage and room sufficient to have produced double that quantity, but could not procure silk worm eggs. During the past two year's operations in the silk factory, we have made thirty-five pieces of velvets; length from ten to twenty four yards each; value from $4 to $6 per yard. Ten pieces of plush from which we made twenty-four dozen silk hats, worth $48 per dozen. One hundred pieces dress silks, flowered vestings, &c., varying in length from ten to thirty yards each, and worth from $1 to $3 per yard. Also sixty dozen cravats and pocket handkerchiefs worth from $1, to $1 75 each; and for all of which I have found ready sale.

Since September last, we have twenty hands regularly employed in the factory, who, with the machinery I now have, manufactured daily from the cocoons about $30 worth of goods. I have about six months stock of cocoons on hand which I have obtained principally from this state, New York, and Pennsylvania, where a bounty is given to encourage their production; and it was the bounty given in this state that has stimulated their production within the last year.

My establishment has been sufficiently complete and successful to repay the outlay for stock and labor in manufacture, and yielding a small profit on capital invested. The more I become acquainted with the business, the more sanguine do I feel of success. I have had many obstacles to contend with, such as my own inexperience, the opposition of friends and speculators, and the impositions in machinery, trees, and eggs, want of proper workmen and materials to construct machinery, and every other difficulty attending a new and complicated enterprise.

I have succeeded in establishing the first regular organized silk factory ever put in operation in this state or the United States, that purchases all the cocoons and reeled silks, from whatever part of the United States it may come, and manufacture the same into dress goods. I have practically demonstrated to the citizens of Ohio and of the United States, that this country can manufacture silks, as well as produce the raw material; and I believe this business will soon be more lucrative to our producers and manufactures, than either the production and manufacture of wool or cotton. I most cordially unite with your petitioners, and would say, that this important branch of business demands legislative encouragement, by giving a bounty on cocoons and reeled silk; and in my opinion, it would be wisdom to increase the bounties equal to that paid in Pennsylvania, Tennessee, New York, and some of the other States. I have not availed myself of the bounty heretofore allowed in this state, but depended entirely upon my own resources and perseverance for success. Yet I would observe, that a bounty given is a powerful stimulant to those that have been and are preparing to feed worms and reel silk. All persons on embarking in any new business, are,

Firstly, at great additional expense, with but partial success; but when a branch of business is fairly established, and many of our citizens understand it practically, then the great mass will profit by their toils and experiments, without incurring their expenses. This is one strong argument in favor of a bounty.

Secondly. In very many instances those engaging in this business are in moderate circumstances, with a numerous family of children to support; but to whom, when once established, this business will afford a profitable employment, when, without it, they would remain among our unproductive but consuming class.

Thirdly. A silk crop is as certain as a wheat, or any other crop; as easily raised, and much less laborious. .

Fourthly. It can be raised to a better profit than wool, from the fact that three pounds of silk can be produced from the same land that would produce only one pound of wool.

Fifth. The labor to raise a crop of silk is completed in six weeks, while the labor of taking care of sheep, and providing them with food, lasts all the year; and a pound of silk is worth five dollars, which will cost no more to transport to market than a pound of wool, worth but forty cents, or a pound of flour, tobacco or pork, worth but four or five cents.

Sixth. Our climate and soil is as well, if not better, adapted to the growth of the mulberry, and the production of silk, than any part of Europe; and considerable quantities can be raised by every farmer without diminishing the products of his farm, and there is scarcely a possibility of producing more than will supply the home and foreign consumption.

Seventh. The mulberry is easier raised than any other tree, and is equal to the locust for durability. The above are a few of the many reasons in favor of a bounty. A bounty granted for ten years will in my opinion lay a foundation to make us a great silk growing and manufacturing state; and that, from the now unproductive class, viz., aged and infirm persons, females and children, and without, at the same time, withdrawing many of our effective operatives from their present employment, we will then be able to manufacture all the silks consumed in the state and which requires a large portion of our present productions to pay for; but that we would, within ten years thereafter, export silks to the full value of our present importations. Gentlemen, grant this bounty for the time petitioned for, and I venture to predict, that the present silk operations, compared with the operations of 1860, will be as the first impression of the spade in the earth, to the entire completion of our now finished canals; equalizing, and pouring wealth into the pockets of our citizens, and enriching and populating our state. Gentlemen, in conclusion, I would observe, that I have a variety of pieces of my manufactured silk goods with me, consisting, in part, of velvets, silk hats, ladies' plain and flowered dress silk, flowered tissue, and laventine vestings, handkerchiefs, &c., all of which I respectively invite you to examine.

Very respectfully,
Your most obedient servant,
JOHN W. GILL.

MOUNT PLEASANT, JEFFERSON COUNTY, OHIO, *December* 28, 1841.

To JOSEPH KITHCART, Esq., *Representative for Jefferson county, Ohio.*

SIR:—The time having nearly expired for awarding a premium of ten cents per pound, to the raisers of cocoons, and as petitions are now forwarding from various silk raising counties in this state praying the legislature to renew, and extend their liberality; I hope you will pardon the liberty I have taken, as an individual, in presenting a few facts that have come under my notice, during the last three years, and which, I think, may have a tendency, to illucidate the subject, and prove the necessity of further encouragement. Having had the honor of superintending the silk establishment belonging to John W. Gill, Esq., of Mount Pleasant, nearly three years, I have had an oporunity of witnessing the operation of the late premium. From January 1, 1840, to January 1, say 1842, I have purchased for Mr. Gill three hundred and fifty bushels of cocoons, besides one hundred pounds of reeled silk, raised and reeled mostly in this state. In order to encourage the raisers of silk, Mr. Gill always instructed me to give the highest price prudence would allow; still many experienced a loss the first and second years, and had it not been for the premium most of them would have given up. You are aware, sir, that in all new adventures, practical knowledge is indispensible; this knowledge the silk raisers have to acquire by dilligence and perseverance. Many went to considerable expense in purchasing trees, but for want of judgement lost money; some the whole by frost and other casualties; others informed me the eggs they purchased were spurious; others not knowing how to hatch the eggs and train the worms met with great sacrifices; still they persevered, and are persevering in reliance upon the future liberality of the legislature. It is my conscientious opinion, that not more than one out of five have cleared themselves, notwithstanding the late bounty; there are a few individuals been compensated, and but a few; the tree speculation is forever abandoned, and the silk trade in all its various standings and bearings, is being fixed upon a solid basis; new raisers of silk are increasing every season in almost every county, and I have no doubt next season Ohio will be equal, if not ahead of all the silk growing states in the Union. I believe, sir, your petitioners do not solicit more of your liberality than has been awarded to other states, by the legislatures of Massachusetts, Connecticut, New Jersey, Delaware, New York, Pennsylvania, Maine &c. &c. The national advantages resulting from state bounties are obvious, if we take a retrospective view of the last three years. Look at Economy, Pennsylvania; Northampton, Massachusetts; Mansfield and Providence, Connecticut; New Jersey, Nashville, Tennessee. In Mount Pleasant, three years back there was not the least vestage of silk weaving to be seen; now look at the silk fabrics sent to Columbus for your inspection, and if encouragement is given to the raisers and reelers, other places I am acquainted with, will commence weaving next season,

and in eight years, will save millions, annually, of our specie being transported to foreign nations, that are now looking upon us with envy and a jealous eye. Congress has kindly extended to us the arm of protection in granting a protective tariff, and all we now stand in need of is, the smiles and liberality of the state legislatures. It may not be amiss to notice the distribution of private capital through this state. I purchased for Mr. Gill, the last two years, cocoons and reeled silk equivalent to eight hundred bushels, which, upon an average at three dollars and fifty cents, amounts to two thousand five hundred dollars, (but have often given four dollars and four dollars twenty five cents per bushel.) This sum could never have been circulated had it not been for the late bounty, which has been like oil to the wheels of industry. It is supposed, by some persons, that American silk is inferior to foreign: this is for want of a better acquaintance with the article. I have devoted thirty-five years to the silk business in London, and nearly ten years in America and I affirm the American silk to be not only equal, but superior (where the worms are fed upon the Italian or multicaulis trees) to any I have seen in London, from France, Italy, China, Piedmont, or Valentia. During the last twenty years in London, I had pass through my hands weekly, from two hundred to two hundred and fifty pounds of silk of various kinds and qualities, so that my testimony, founded upon practice and experience, may be relied upon. I have no other motive in this address, than the prosperity of my adopted country, of whom I have the honor to be a citizen. Should it occur prudent to you, sir, I should wish these items laid before the honorable and highly respected body of Senators and Representatives, that they may perceive their late libality has not been in vain.

Permit me to remain honored sir,

Yours with sentiments
of the greatest respect,

JOHN FOX, Sen., *late superintendant to John W. Gill Esq., silk factory, Mt. Pleasant.*

P. S. I forgot to name, the aforementioned states, have awarded bounties on cocoons, from ten cents to twenty cents per pound, and on reeled silk, from twenty-five to fifty cents per pound.

For the Western Farmer and Gardener.

Berkshire and Woburn Hogs again.

Dear Sir,—I perceive in the 16th No. of the Kentucky Farmer, dated the 18th inst., that Dr. Martin answers the enquiry made in the 13th No. of the Farmer, and informs the public what the Martin hog is. He says in them is united the blood of the White Berkshire, the Neapolitan, and Woburn, the latter predominating. He says the advocates of the Black Berkshires are endeavoring, generally, to make the public believe that no hog that is composed of two distinct stocks should be used as a breeder, and that when such were used the produce would be inferior. I for one do'nt say any such thing. It is true I do'nt believe that the Martin hog crossed as the Doctor represents, will make as good a hog to breed from as the Berkshires. My opinion is, that the Berkshire crossed upon the common hog of the country will make a better improvement than any other; but to breed from the Martin hog, there would be no certainty what their produce would be, you could not tell whether it would be Woburn, Neapolitan, or white Berkshires. Such a cross may make very good pork, and be very good feeders, but I should not think the farmers would take hold of such as breeders.

I believe that the cross of the original Berkshire with the Black Siamese hog was a judicious one. It had a tendency to reduce the size of the former, and give early maturity, greater aptitude to fatten, and no doubt, greater vigor and constitution, and as an evidence that this cross has done all that I have named, you have only to look at the animals thus produced, and the majority of our farmers, if not all, will acknowledge that the improved Berkshire hog, is the handsomest in the world, and when fairly tested will prove the best hog for the farmer of all others. My opinion is, Mr. Editor, to improve stock of any kind by crossing, we must always cross with something superior to the stock on hand, but I would not recommend a cross of the Berkshire with the Woburn for the purpose of improving the Berkshire, but I have no doubt the Woburn would be very much improved by a judicious cross of the Berkshire, and I do hope that none of our farmers who own the Woburn breed of hogs will suffer prejudice to prevent their making the experiment. I do honestly believe the improved Berkshire hog superior to all others, and am glad to find that Dr. Martin has acceeded to my proposition, made in the December No. of the Western Farmer and Gardener, of *feeding six of his thorough bred Woburns*, against the same number of my Berkshires.

I am anxious to have the two distinct breeds fed as proposed, as I have no doubt of the result, viz: that the Berkshire will yield more pounds of pork, on

a given quantity of food, than any other breed of hogs that has no Berkshire cross in them. I would propose, therefore, that the Doctor and I each select a man, and let those two men make choice of a suitable man to take charge of our pigs, and feed them as proposed. I would name Major George W. Williams of Bourbon, near Paris Ky., if he will take the trouble of attending to it. My pigs, I can furnish about the first of March next, from three to four months old. Their exact age and pedigree I will furnish in time for your next number of the Western Farmer and Gardener, and let them be fed till the last week of November nex , and then drove to this market, or any other that those two men may agree upon, and weighed &c., as proposed.

I here wish to make a remark, with regard to a statement made by me in my letter published in the December No. of the Western Farmer and Gardener. I stated it as a fact, that Mr. Weathers was a tenant of Doctor Martin's. It was upon good authority I made the statement. I believed it to be true when I wrote that letter. A near neighbor to Doctor Martin told my informant (and they are both men of respectability.) that Mr. Weathers lived on a farm of Doctor Martin's. I am governed by no improper feeling toward Doctor Martin personally, my only desire is, and has been, to have justice done to all parties. I have also been informed by several very respectable gentlemen, that in the trial made by Dr. Martin and Mr. Fanning of Nashville, that some time previons to the time appointed to commence the trial, the Doctor physicked his pigs, and reduced them to mere skeletons, whilst Mr. Fanning was feeding his all they would eat. The consequence was, the Doctor's pigs weighed very light when he commenced the trial, and gained more rapidly than Mr. Fanning's, which had been regularly feed all the time. If this is a fact, the Doctor never published it.

The Doctor has somewhat the advantage over me in that, he is skilled in medicine. If he really believes it will be an advantage to our pigs to have them well physicked out, and their blood pure, previous to the trial, I should like to know what medicine he gives his, and how much, for I suppose what would be good for the Woburns, will be good for the Berkshires.

As to the Doctor's proposition of feeding his boar Albion against Windsor Castle, I would remark that Windsor Castle is better employed at present, therfore we decline for the present accepting the Doctor's banter.

Very respectfully,
JOHN MAHARD, Jr.
CINCINNATI, January 24th 1842.

NEWARK, January 18th, 1842.

Mr. AFFLECK:

SIR,—In your efforts to elevate the system of husbandry in the west, and to promote the improvement of stock, you doubtless have noticed the pressure of the times and the want of a certain and stable mart for productions, to be a difficulty that is almost insuperable. The reply is often made, "I farm as well as the productions will warrant." "More skill would be useless, and more care vain with such prices and the uncertainty of sales." Now that these are difficulties in the way all must acknowledge. The remedy for these difficulties lies, however, within ourselves as a people. If we would rely more upon the resources of our soil, industry, climate and skill, and less upon the productions of foreign paupers and foreign slaves the evil would at once be obviated. When Britain, by a duty on teas, sought to raise a revenue from these colonies, our fathers, by a noble spirit of self-denial, resolved at once they would drink no tea. They kept the resolution and determined to be, and were independent. We have, however, been gradually sliding back to a condition of dependence, not upon Britain alone, but upon nearly all the foreign world; and the result is universal confusion in all our affairs. We purchase gew-gaws and fineries—chaff, for cash, of those who will not take our breadstuffs and meats to feed their starving millions. The result, too, is we are drained of our money, and have no market for our surplus produce. You may say these remarks smack too much of politics for the Farmer. Perhaps they do, in one sense. But are they not of the most vital importance to his interests in another? The cupidity of merchants will import foreign goods, so long as a market for them can be found, and it rests with the farmers to say whether they will continue to purchase and use them, to the general depression of all their leading interests, or whether they will not emulate their self-denying ancestors, and resolve again to be independent. Let the mass

of the people say we will now and henceforth, rely upon our domestic resources, we will wear American cloths, cottons, linens, silks;—we will encourage American industry of every kind,—how soon would a change come over us. A large portion of the capital now employed in importing foreign goods, would be invested in producing—manufacturing them at home, and thereby creating a sure, constant, and substantial market for the surplus produce of our farms. On our cheaper and more fertile lands, we can produce the raw materials for manufacture, and all the means of subsistence cheaper than in any foreign country with which we trade. The character of our people too, so elastic, so enterprising, so ingenious, would soon supply the vacuum occasioned by the refusal of foreign goods, and American thrift, and American comfort, would again soon be proverbial.

But the evil of the present condition of affairs, operates directly, and injuriously upon the prospects of American, or at least Western agriculture, in another aspect. And it is to this point of view, that I wish, mainly, to call the attention of the farming and cultivating community.

That the cultivation of the soil, is the basis of public prosperity, is no less an axiom in Europe than in America. And whatever tends to injure the soil and make it less productive, though it may work a temporary good, is sure to produce a permanent public injury. The history of the whole world, and especially these United States, demonstrates this truth. The older states once, were extensively cultivated in the cereal grasses. Even Maine and New Hampshire, amid their snows and their rocks, New Jersey, upon her sands, Virginia upon her slate fields, grew wheat abundantly from their virgin soils. Neither of these States was too far south or north to be excluded from what is termed the "Wheat Belt." An improvident and careless system of husbandry, destroyed that quality in their soils which was necessary to the production of this esteemed grain, and no measures were resorted to, to restore them. The North River country in New York, the Black River country in the same state, were once considered the wheat growing sections and most amply repaid the labor of the farmer, but the same causes, produced like effects there; and the opinion prevailed that they were too far north, the seasons had become too cold and unfavorable for this crop. Then the Gennesse country stood famous as the wheat region, and its soil was thought to be inexhaustible, but within the last eight years, a clamor has come up from that land, that the wheat crops fail there.

With these facts before us, have we not too much reason to apprehend that Ohio,—this unrivalled Mississippi Valley, will in a few years be excluded from the Wheat Belt? If there is danger of such an appalling result visiting us, the whole farming community cannot begin too early to enquire what is the remedy? And truly, with the lights around us, we will be far more culpable than the people of the older states, if we permit such a catrstrophe to come upon us. The whole remedy lies in one word. Manure. But its application, and the choice of it, is only to be ascertained by experience, close observation, and that intelligence which is universally imparted by the many useful agricultural journals, and agricultural books, which are now to be obtained every where.

I may resume this subject again, and conculde in detail, the views which I have barely hinted at here. The end of my sheet warns me to end.

Yours truly,

I. DILLE.

Cottages, No. 2.

(BY C. W. ELLIOTT.)

In the December number of the Farmer, I gave a few general remarks upon the forms of cottages, and two examples.

Gateways are among the most prominent accessories to them, and may be made, not only useful, but, to give a pleasing or unpleasing tone to a whole place. The gateway is the first glimpse that we have of the taste of the proprietor; it prepares us for a farther acquaintance, when we shall find our prepossessions either satisfied or disappointed: we may not always be aware of this influence, but that so small a matter as this does influence us none can doubt; It follows then, that this should not be neg-

lected. Harmony, it seems to me, is the chief element of Landscape Gardening: Not that striking effects, or picturesque forms, are never to be attempted, but that they should be made with judgment. The Gateway then. should harmonize with the general character of the place: if it be massive and imposing, we expect nothing less than a broad sweeping carriage way, winding between groups of fine trees, to a mansion, which shall be not only an evidence of the taste, but the wealth of the proprietor. If to such a place we find, (as is too common,) but slender white posts, the whole entrance looking meagre and starving, or a slovenly combination of pine boards, that "drag their slow length along," we can believe that a meanness or a carelessness exists in that man's mind, that will at some future time pain or disgust us. These remarks, may, as well be applied to the cottage; hardly any one would think of building to a small place, an imposing gateway, that will by the expectation it excites, disappoint us, and render the whole place petty and mean by the contrast.

I have always thought, that for small places at least, the most pleasing effects might be produced by Rustic-work; that is, the use of the body and branches of trees with the bark on, in the making, not only of gates, but a variety of other works; and I have determined, should I ever have an opportunity, to build such a Gateway, as I have imperfectly shown at the beginning of this article. If the branches are cut in the winter, the bark will hold for a great length of time, and even when it does peel, although some beauty is gone, yet the grace, proportion, and form remain.

A very common fault, in the gateway, is, that it is too narrow; I should say that nine feet would not be too little space for a carriage to pass well: it certainly is not too much. I have mentioned the beauty of form, and proportion; the form of the posts should (when this can be consulted) bear some slight resemblance to the forms that prevail in the buildings; and it strikes me that they should have a greater diameter in proprtion to their height than they now commonly have; this gives not only firmness, but the *impression* of solidity, which is not to be overlooked.

There is a little disposition to carry the gate posts too high; it is difficult to lay down any positive rules upon the subject, but if one third of the height of the post is above the top of the gate, the effect is commonly pleasing; it should be less where there are no side gates; the posts of which should be very little (if any,) higher than in the continued fence. I wish to call the attention of the reader to the increased beauty that is the consequence when the graceful form of a vine, wreaths itself around these necessarily rigid supporters. The various Trumpet vines, the Virginia creepers, the honeysuckles are all beautiful, hardy, and easily to be got; but better than all others is the Ivy, if it will stand the climate, because it is fresh and green through all the year. Now if such a gateway as the one I have pictured, formed with the foot of some ancient oak, overgrown with vines—its branches shaped into the gate itself, can be made, and the fence can be continued in the same style, I am persuaded that it would rival the beautiful hawthorn hedge, which requires so long a time to produce an effect.

Let me ask of the reader, that he will not make a straight carriage road to his house, if he can possibly avoid it. When the distance is short, it is better to approach the house in a gentle curve; and when it is long, the monotony of riding half a mile, with the same object, in the same aspect, is inexpressibly dull, and stupid compared with riding over the same road, which winding as nature would direct, sometimes shuts out the house, and at others presents it in a different form, and in varied lights.

White Berkshires.

Editor of the Farmer and Gardener:

Dear Sir,—As the subject of *White* Berkshires is attracting considerable attention just now, I shall agreeably to your request, state such information as I happen to possess upon the subject, and in doing so, beg to observe that my remarks are offered in perfect comity to all those owning them, and without the slightest wish to prejudice the public against the breed, or injure the value of the animals.

The first that I ever heard of, were those imported by the late Col. Williams, of Montevidio, Long Island, being a litter of six pigs, called Berkshire—some of these were pure white, others of a mixed color of Black and white, and such as I saw of them were coarse in their hair

and appearance, and have always bred so. I do not believe that they had any Berkshire blood about them, and those calling them so in England were deceived, and were the cause of deceiving others. We all know now that it is a popular name abroad as well as at home, and there are plenty of persons who are not over scrupulous in applying it there as well as here, to all such annimals as they can hope to sell at high prices by so doing.

The second importation of White Berkshires was sent to a distinguished gentleman in Kentucky. This I esteem as a better animal than those I saw of Col. Williams' importation, but as all that litter have not yet fallen under my observation, I wish to be understood as speaking only of such as I did see, for others of them may have been finer for aught I know. But this second above, I should think, was a cross of the Berkshire upon the English, or Irish Grazier, or perhaps, the pure Grazier himself, as he breeds and looks very much like the Graziers in possession of a gentleman in this town, from one of whose sows, I remarked a pig the other day, pure Grazier, that had nearly all the dark spots of the Berkshire, with his fine form, hair, skin. &c. Perhaps this may have been one of nature's anomolies.

The third importation was made in New Orleans, pr. Brig Tallahassee, from Liverpool, and they found their way up to Hamilton, in this neighborhood. They were described to me by their owner as a tolerable pretty hog, and quick feeder, but lacking greatly in constitution, and had nothing like the size of the pure, well bred Berkshire. They are but slightly esteemed where they are.

The fourth importation was from a stock of Mr. Etche's, who formerly resided in Liverpool, but now in Derbyshire. I saw them when in England last summer. They are a tall lank hog principally white, with various small colored spots on them. I asked Mr. E. what authority he had for calling them Berkshire hogs, he replied, none, more than that they were so called in Northamptonshire, I think it was, when he purchased them. I told him they were not the pure breed, he said as he never was in Berkshire county he could not say as to that, but had bought and sold them as such, and was very sorry if he had been deceived. I remarked that he certainly had been, as he would easily convince himself if he would take the pains to ever go into Berkshire county to do so, and there the matter ended between us, I observing that I should detail this conversation publicly, if ever called upon to do so, in America, to which Mr. E. made no objection.

A fifth importation was attempted last summer, but did not succeed, in consequence of the vessel sailing before the pigs arrived. They were bred in the vicinity of Windsor Castle, Berkshire county. I saw plenty of them while abroad, but really did not think them one whit superior to thousands of the common stock hogs of the Ohio Valley. I hope no offence will be taken for saying so, for it is my deliberate judgment, after seeing hundreds of them, and canvassing the whole thing thoroughly over in my mind.

Windsor Castle, as you know, is the Royal residence of England, and the origin of these White Berkshires, as I was informed there, was a present from the late celebrated Mr. Bakewell to George the Third. They were neither more nor less than the Leicester hog, such as we possess in great numbers at the North. I repeatedly asked in England, what they called them, and the answer invariably was, "Old king George's breed." They are now much deteriorated when bred pure, but when crossed with the real Berkshire, greatly improved thereby. I saw their crosses very frequently in the farm yards, but no one ever pretended to me that they were at all equal to pure bred Berkshires.

Thus *five* distinct breeds of white Berkshires are accounted for, and the probability is, if the name continues for a few years to be popular with us, we may have *five* hundred more to add to them. I am sure if the Scotch and English Black cattle were sent over to this country, under the name of Durhams or Short Horns, that the breeders of these superior animals here, would rise up in arms, in opposition to the name being thus assumed by a spurious breed, and I could never see, though names may be called nothing in themselves, why the breeders of real Berkshires should be less sensitive, and why they may not with equal justice proclaim the counterfeits, even though they may express themselves both warmly and indignantly upon the subject. If they did not, there could never be any dependence upon breeding, and the false would soon usurp the place of the true.

"*Improved*" Berkshires I also saw in England, but they were of a kin, in my

humble judgment to the Whites, and far inferior to the pure bred.

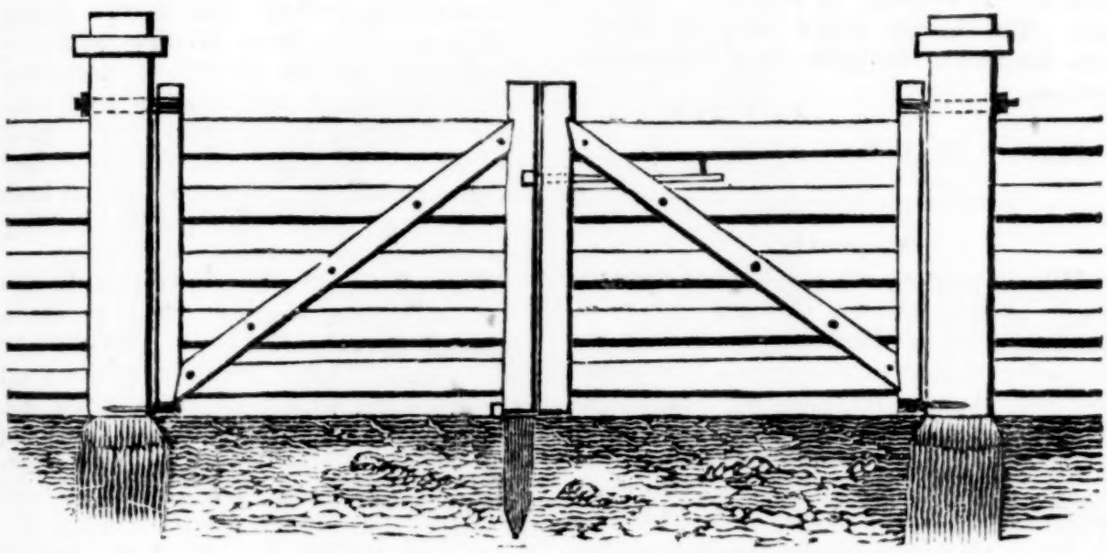
Of "White Berkshires" it will be seen now that we have great plenty, native bred in America, from Nova Scotia to Louisiana. Such as I have seen were mostly of the Leicester, Byfield and other inferior white hogs. Their great weights are frequently much boasted of, but nothing that has fallen under my observation, is anything like equal in size and food points to the Miami hogs so abundant in this quarter. If breeders, therefore are particularly desirous of White Berkshires, they have only to drive a pure dark colored one up the valley, and all such herds as he may happen to pass in the route, they can christen as such, and the country will at once be most abundantly supplied, without the necessity of further importations either from the northern states or abroad.

If any one can suggest a better or cheaper way of manufacturing the White article, I should now be glad to hear from him, and in the mean while, am

Very sincerely yours,

A. B. ALLEN.

CINCINNATI, January, 1842.



For the Western Farmer and Gardener

MR. EDITOR:—The maxim practiced by the lamented Eli Whitney in all his valuable labors, that "there is nothing worth doing, that is not worth doing well," applies with greater force, perhaps, to the operations of a farmer, than that of any other occupation; and in no part of the improvements of a farm, is it more manifest, than in the construction of a Farmer's Gate.

A majority of the gates erected by the farmers, (when they have any at all,) are but little more convenient than the old fashioned slip-gap; they are generally dragging upon the ground, requiring the utmost exertion of a strong man, to *carry* the gate around, as it is opened and shut. This arises from the gate being so long, that the brace has but little effect, which allows the gate to sag down at the forward end; and also to the weight of the gate, which being hung to but one post, causes it to lean over, when the ground is softened in the spring of the year.

The above cut represents a gate which I have had constructed, and from the test of two years use, I feel warranted in recommending it as the best gate that I have ever seen; and as combining the most advantages, with the fewest defects.

It is constructed in two equal parts, and each half is hung to either gate post. It is made of three by four inch scantling, for the upright posts; and of one inch boards, six inches wide for the horizontal ribs. The ribs are morticed through the posts, at the proper distances apart, and firmly secured by wedges and pins. A brace made of an inch board, four inches wide, is placed on one side of the gate, extending from near the top of the front post to near the foot of the back post of each gate. At every crossing of the horizontal ribs, the brace is rivited to the ribs. Near the middle of the gate, opposite to one of the upright posts, a piece of three by four inch scantling is driven into the ground, leaving about six inches projecting above the surface; upon one side near

the top, a spring is fastened to embrace the lower end of the upright post of one gate. The latch of this gate is made of a piece of board two inches wide and one inch thick, about two feet long; which passes through a mortice made in the front post, and is suspended by two iron-wire links, with eyes attached to its upper edge, and to the under side of the upper rib of the gate. The upper eyes are placed one inch further forward than the lower, which makes the latch push forward into the catch provided for it in the front post of the opposite gate.

The hinges are made of iron. The upper one should extend through the large post and be secured by a screw nut, or key. The lower hinge may be driven into the foot of the post about four or five inches.

D. LAPHAM.

January 22, 1842.

Newberry,

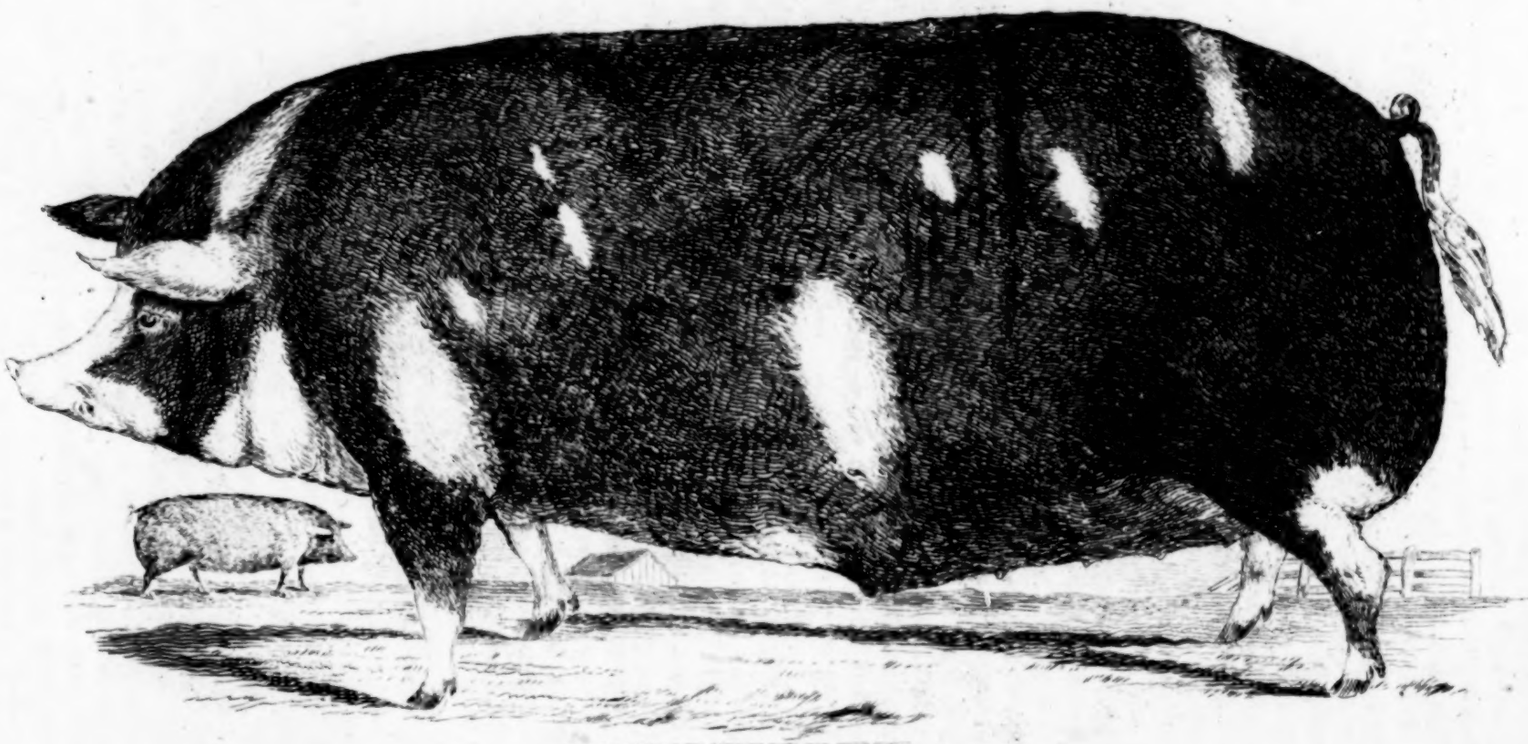
Whose portrait we give on our opposite page, is well known in character, to all the breeders of Berkshires Being the property of the publisher of this paper, our remarks or eulogiums on him, might be deemed partial—we shall, therefore, content ourselves with giving such account of him, as may have originated from his former owners, and which we shall condense in as few words as possible. He was imported into this country in the fall of 1838, by Mr. Siday Hawes for John Lossing of Albany, who considered him equal, if not superior to any hog he ever possessed, and who stated, that when he shipped him to Mr. Curd of Kentucky, that he and his cage weighed 880 pounds. R. Allen, Esq., of whom his present owner purchased him, says in a letter, "that those who have seen him, consider him ahead of any other hog." Numerous commendatory opinions might be here added, but as the object is merely to describe him as he stands, the whole might, and would be extraneous. His present weight has not been ascertained, nor would it be of any use, though it is presumed to be between 5 and 600 pounds, he having been reduced as much as possible for service. His length, from between the ears to the root of the tail is 5 feet 4 inches, girth round the heart, 5 feet 4 inches, round the loin 5 feet, 6 inches. This portrait of Newberry is inserted in the Farmer and Gardener, at the urgent request of the numerous breeders of this district, having stock of which he is the origin. C. F.

For the Western Farmer and Gardener.

Mr. Affleck,—

A mutual friend, who feels an interest in the success of your valuable periodical, has requested me to contribute something for your columns, on the subject of fruit. No doubt he has been induced to make this request, from having noticed that I am cultivating good fruit, and with considerable success. I have taken up the pen more in compliance with his wishes, than with an express notion of communicating any new light. Essay after essay has been written and published, with all the directions necessary for the successful propagation and management of fine fruits; and by the most intelligent and experienced nurserymen and horticulturists. The subject has been a long time before the public, inviting attention by its charming simplicity.

Why then, it is often asked with surprise, are there so few good orchards, and so little valuable fruit cultivated by the farmers? Why are there so few good crops of corn, wheat, potatoes, grass, &c. grown in the country? Why does not every farmer raise his 75 or 100 bushels of corn, 30 of wheat, 300 of potatoes, and 2½ tons of hay to the acre? "What has been done, can be done." And why can not one do it, (with the same means) as well as another? The reasons are many and obvious. Prejudice against "new fangled notions;" partiality for preconceived opinions; reverence for the good old ways of our ancestors; want of scientific information, induced by a contempt for *book farming;* want of study, reflection and observation on the plain, simple operations of nature; want of energy and enterprise; want of something to stimulate to efficient exertions; all operate to produce and perpetuate the present half-way, careless, mode of cultivation, too common amongst farmers; but above all, ignorance is the most common, and the most inexcusable. True, there are many encouraging exceptions. Many are converts to the doctrine, extensively disseminated, that science and intelligence, study, and reflection, reading and observation are necessary to the farmer; inasmuch as they enable him to improve his lands, his crops, his stock, his fruit, in short every thing about him. The whole code of directions necessary to accom-



NEWBERRY.

The property of Chas Foster Publisher of the Western Farmer and Gardener

plish the object, so desirable, may be comprised in two words,—*study nature.* Take your lessons from her. Mark her progress in the spontaneous growth of the forest. Watch her intimations, learn her designs. Her operations are always correct, and furnish all the hints necessary to the successful cultivation of fruit and fruit trees. Second her efforts. The art of man must be brought in to aid her operations; but all artificial means must accord with her designs, and not oppose or frustrate them, which is too often the case. Mr. Fessenden, formerly the talented editor of the New England Farmer, once remarked, that "there is nothing in which haste makes greater waste, or negligence punishes the person who is guilty of it, in a more exemplary manner than in the planting of trees. If you *half plant* a tree, your soil is encumbered, perhaps for years, with a *half alive* stock, a monument of the indolence and bad husbandry of the owner of the premises. We would as soon see dilapidated barn doors, rotten fences, but three and a half feet high, or holes of broken windows, half stopped with the ragged remnants of old petticoats, as cankered, worm eaten, blasted fruit trees, dying by inches, about a farmer's homestead. If a tree is badly set out, or stinted by mismanagement, when in its infancy no subsequent art or attention will make it thrive. Therefore, I tell you, again and again, what you do, do well."

The too common mode, is certainly wrong, and needs correcting. Too many trees get their death wound in taking up. Proper care is not taken to take up the whole spread of roots, or to prevent them from being mutilated, or to give the head the proper form. The wounded roots are not trimmed, but cramped in a hole much too small, and much too deep, in contact with a cold unfriendly soil, under the erroneous impression that deep planting is necessary to prevent injury from the winds. The earth taken from the hole is carelessly thrown back and trodden down, and the tree left to take its chance. In its struggle with life and death, it receives no fostering care from any friendly hand, but is left to struggle alone, a prey to the depredations of insects, if not to animals of larger growth. At length, however, the tree, naturally tenacious of life, and deriving a little nourishment from the soil in the *neighborhood*, and aided by the genial influences of kind nature, in overcoming the obstacles man had thrown in the way of its growth, obtains sufficient vigor to throw out a few sickly shoots. And then they are left to follow their own inclination. A stinted, moss-covered, ill shapen tree is commonly the consequence of such culpable neglect. In process of time the anticipations of the husbandman are realized, and his *skill* rewarded, by a display of fruit. But on tasting, one would be led to conclude that nature had designed it as *forbidden fruit.*

Fruit trees from the seed, should be cultivated with as much care as any other choice plant. Am I losing sight of my text? No, study nature. Aid and assist her, but do not thwart her efforts, nor expect her to do every thing. She will always do her part when properly encouraged. The quality should be changed, by budding or grafting. This is the only way to insure good fruit. It should be done in the nursery. But if it has, unfortunately been neglected there, it may be done afterwards.

The grand secret consists in so adjusting the bud or scion to the stock, and forming such a perfect contact and union of the inner bark and sap vessels of each, that the sap must naturally and necessarially, flow from one to the other. There you have the theory: the process or practical part may be learned from witnessing a single skillful operation. When it is considered that the best kinds of fruits are as easily cultivated as the bad, or indifferent; and that the difference in the outlay, if any, is so trifling, that it would not be minded in any other investment, where the odds are so decidedly in favor of the best, is it not strange that one can be found claiming the enviable title of farmer, who can voluntarily and contentedly deprive himself and family of a luxury, which to such as know how to appreciate its value, is deemed indispensible. How few are acquainted with the delicacies of a good kitchen garden, or with the luxuries of the orchard or fruit yard.

"It must be confessed as a notorious truth," observes Dr. Thatcher, "that an orchard, planted and cultivated in the most advantageous manner in point of beauty, profit, and convenience, is scarcely to be found in the sphere of our observation." These remarks were made by a celebrated orchardist, as applicable to the farmers of New England. With how much greater force will they apply

to us, western farmers? Many orchards among us, contain not a single tree producing fruit which an amateur would acknowledge as being distinguished for a single good quality. Brother farmers, "these things ought not so to be."

The current volume of the New England Farmer, contains a report from the chairman of a committee appointed by the Board of Trustees of the Massachusetts Society for promoting agriculture, awarding the premium of fifty dollars, offered for the best orchard in the State. to Capt. George Kendall of New Bedford: together with some valuable observations, on his mode of culture, by the successful competitor. Now I believe the same means will produce the same result, just as naturally and certainly as the same cause produces the same effect. Of course I infer that every farmer who will "go and do likewise," may have, if not as good a one as Capt. Kendall, at least a much better one than he now has: enough better to pay the cost. His orchard has been planted out, from the nursery, four years last April. At that time, a number of the trees measured thirteen inches in circumference, near the ground, and at three feet above, eleven inches. Extent 3¼ acres. The soil a light sandy loam. Number of trees 212. Distance apart 25 feet. (Too close, by ten or fifteen feet.) Number of varieties 57, of the best kinds. The ground has been planted in *roots* and manured, every year since the trees were set. No manure used when setting; but a bushel of fine stable manure was put around each tree the first of November, following, and repeated for two years. With a view to destroy insects and promote the health of his trees, he scours them every spring with *oil soap* and sand, and gives them a coating of *oil soap* equal to a thick coat of paint. He says the *oil soap* is made by *refining and bleaching sperm oil*; and is composed of from 33¼ to 35 per cent. potash, and the balance *sperm oil*, and impurities from *oil*.

Common ley, a solution of potash and water, are all efficacious in destroying insects, and promoting the health and vigor of the trees; equally as efficacious, I doubt not, as *sperm oil soap*. His observations on planting are philosophical, and accord with nature. He is in favor of *shallow planting*; that the roots, as he says, may luxuriate in a good soil, more immediately under solar influence. He cuts off the mutilated roots smooth, covering the large cuts with grafting wax. He soaks the roots in water for "*above half an hour*" before planting, thereby inducing the mould or loam to become attached to them. (Barely immersing them in water is necassary, and all that is necessary for the above object, when the trees are recently from the nursery, and the roots fresh.) He digs the holes so large that every root may extend its length naturally without binding or cramping. He puts nothing around the roots but good surface earth, carefully worked in by hand. He prefers planting in the spring.

A few additional remarks would have made his system complete. Trees, taken from the nursery should not be less than five or six feet high; of a thrifty, but not too rapid growth, clean smooth bark, and well furnished with sound roots. The wood of *sound* roots, when cut is always white. Such as are in any degree brown are discarded, and should be cut off till you come to clear white wood. Three branches besides the leader, are enough for the head, for the first year. Fruit trees require a good, light and warm soil. Wet, heavy land is not congenial to the health of trees, or to the quality of the fruit. Trees transplanted from a rich to a poorer soil will inevitably languish. Nurseries, therefore, should not be manured if the soil is strong enough to produce healthy, thrifty trees without. To prevent injury from drought, spread around the trees a quantity of straw, old hay or something of the kind, which is to be removed in October. Pruning must be carefully and faithfully performed, when the sap is in motion, in May or June, by removing all superfluous branches, while small, and such as are likely to cross each other, or obstruct the influences of the air, sun and rains. There is no part of the management of fruit trees more important than this. And there is no part more shamefully neglected; or, if performed at all, that deserves more reprehension. Every man or boy, who can swing an axe, thinks himself competent to perform this nice operation; and so he is, if nothing more is to be considered, than chopping and clearing away some of the branches. Now if we take our lessons from nature, on this subject, we may be the wiser from her teachings. How does she intimate her designs in this particular? When a small limb is cut close and smooth from a tree, a new bark, or kind of callous ring, gradually extends itself over the wound, and heals it without injury to the tree. Here is an inti-

nation too plain to be misunderstood. On the contrary, when there is a stump, or spur, left projecting from the tree, the new bark does not form over it, but the stump dies, and becomes rotten, thus a wound is inflicted which nature, unassisted, is unable to heal; and the larger the limb, the more fatal will be the wound. Let it be remembered that he who studies nature, watches her intimations and heeds her admonitions, will be the most successful cultivator.

The foregoing remarks claim no merit on the score of originality; but are nevertheless valuable, as being the result of the experience and observation of some of the most eminent practical agriculturists. Their object is to awaken farmers to the importance of cultivating more and better fruit. If they accomplish their object a great increase of innocent and healthy enjoyment, and fireside comfort, if not of substantial wealth, will be the consequence. If they fail of their object in many instances, it will be nothing strange, for "precept upon precept" have been found necessary, and often unavailing, to induce many of our farmers to get into the right track.

J. TOWNSEND.

FALLS TOWNSHIP, Muskingum Co., Ohio.

Sheep and Wool.

MR. EDITOR:

I have been greatly pleased with the late able Communications that have appeared in your recent numbers upon sheep and wool, and you may well state that England owes much of her greatness to the production of them, and the manufacture of woollens. Nor is she contented with paying such attention to these important productions at home alone, but is now pushing them with all her might in her colonies abroad, so much so, that it is calculated that Australia will supply her manufacturers with all the fine wools she may need in the course of a few years, thus saving her the necessity of further importing from Spain, Germany and Russia.

There never was a finer country on earth for growing mutton and wool than the lighter soils of the south and west of the United States, especially those of the hilly and mountainous regions. There seems to be something peculiar in the herbage of such districts as the hills of Alabama to make mutton, for we find it there, equal to the most delicate Welch, Dorsetshire, or South-Down. Wool too there may be produced of the finest fibre, and no doubt a sheep with proper care and attention to well appoved rules of scientific breeding, perseveringly followed up, may be produced in that quarter, that shall unite all the good qualities so long sought after abroad, viz: size, good form and constitution, delicacy with leanness of meat, fine heavy fleece, easiness of keep, and early maturity. Following these when coal for generating steam or mill privileges exist, would doubtless come the manufacturers to fabricate the wool, these again would make mouths to eat the mutton, and thus might great and populous communities be eventually grown up, where now stands the lonely forest, and lands that are generally considered barren and worthless, be made most valuable in their products, and of a large price.

The south seems to be almost dormant on this subject, for there it is going on from year to year, in extending nothing saving Cotton plantations on the rich alluvials, while now immediately before our eyes, Great Britian has commenced the cultivation of this plant so largely and successfully, that we shall soon be driven from her market by her colonial supply from the East Indies. It certainly behooves us to stir aboutin this matter: hogs and beef cattle are already too low, wine and silk require considerable time for returns, but here is something immediate, that we can not only eat but wear.

I have heard much lately of South-Down sheep as best adapted to our soil and climate, but am fearful it will not wholly do. Its wool is bountiful and sufficiently fine for all family use, its carcase is of good size when well bred and its mutton particularly lean, and of the right table quality. But Mr. Editor, when we come to export our wool, as we at first shall have to do, the price of fine in the New York market, is double that of coarse, and yet the charges of freight &c. are nearly the same—how can we effect crosses on these that will fine the wool, and if so what material shall we use?

Your answer to this question will oblige an

ALABAMIAN.

We have heard of attempts in England of crossing the South-Down on the Merino, and the Saxon, by Lord Western and other distinguished breeders of fine woolled sheep, to bring about the very object proposed by our respected correspondent, Alabamian, but we believe that the success has not been as great as was

anticipated, by its rather enthusiastic admirers, owing as we understand to rather discordant elements existing in the two breeds, that seem to forbid their properly and truly amalgamating. Other attempts we understand are now making in one of the Easten Sates, with doubtful hopes, which if they prove successful, we shall hear of them in due time. In the mean while, we would recommend "Alabamian" if he has a flock of sheep, not to cross them, but always selecting the largest and best sheep, to breed from, those that seem to combine not only good mutton qualities, but fine thick fleeces, of the discription of wool he wishes to raise, paying special attention to the quality of its fiber. This indeed is the only true way of breeding. C. F.

For the Western Farmer and Gardener.

Manufacture of Silk in Ohio.

Mr. Affleck,—Having recently paid a visit to the silk Manufactory of Mr. John W. Gill, of Mount Pleasant, in this State, I offer you for publication, a few notes taken on the spot, which may serve in some degree to show that the manufacture of silk in this country, is not only practicable, but under skillful and proper management, really *profitable.*

The first operations of Mr. Gill, were commenced in 1838, by the purchase of $400 worth of Mulberry trees. In 1839 he commenced manufacturing—producing that year $1000 worth of fabrics. He has now in operation four Piedmontese reels with improvements, one winding machine for raw or reeled silk, two twisting machines, preparatory for tramming, one doubling machine, two tramming machines for organzine, one winding machine for dressed silk, and several looms for weaving the different kinds of fabrics All the machinery, excepting that for weaving is propelled by a steam engine, yet the most delicate operations are performed with the greatest exactitude. The whole cost of the engine and machinery up to this time, is about $4,200. Thirty acres of land, worth $100 per acre, are devoted to mulberry trees. He employs, at the factory, twenty hands, one half of which are females, and of these several are children, from ten to fourteen years of age. The children tend the reels, prepare the cocoons for reeling, &c., &c. The females are paid from $1 to $2 25 per week, for weaving, and all job-work, he pays the London established prices, and with those the operatives are well satisfied. Some experienced females can make at job-work, $5 per week.

Mr. Gill's fabrics are all excellent, and some of them uncommonly beautiful. He exhibited a piece of Lustring, which is by good judges pronounced superior to the best imported, and yet this, as well as all his other articles, are afforded at the same or a less price, than the foreign ones of the same kind.

Mr. Gill has manufactured during the last year, upwards of $9000 worth of goods—and notwithstanding all the obstacles attendant on a new and untried business, has been able to realize a clear profit on the capital invested of ten per cent.

Mr. G. is clearly of the opinion, that nothing but a little legislative protection is wanting in the *outset* to establish the silk manufacture among us, upon a sure, substantial and profitable basis. The progress which has been already made towards effecting the important result cannot but be gratifying to every well wisher to his country's independence and prosperity—and the time is approaching when those who have demonstrated the feasibility of the silk manufacture among us, will be regarded as among the greatest public benefactors of the age.

Mr. G.'s establishment is managed with admirable neatness and order, by Mr. Fox, the superintendent. Mr. John Fox, jun., appears to be a man of much mechanical ingenuity, and under his direction the machinery has been made and put up. The machinery at the extensive silk works belonging to the community under Mr. Rapp, at Economy, Pa., was also erected by him. On visiting this place, a year or two ago, I was struck with admiration at the performance of a machine which he had just put in operation. With it Mr. F. was weaving *at the same time, nine* different pieces of ribbon, each varying in width, colors, and figure. This machine, so complicated in its structure, and wonderful in its operations, he erected and set in motion, with no other guide than his *own brain*, not being permitted to bring with him from London, even a *draught* or a *figure* relating to it—yet on its first trial it was found to be perfect in all its parts!

While viewing the different departments of Mr. Gill's establishment, and observing the apparent cheerfulness and contentment of the operatives, I could not

help reflecting how much better it would be for many of the children in our towns and in the country, could they be similarly engaged, earning their dollar, or dollar and a half per week, instead of being brought up, as they too frequently are, in idleness, filthiness and vice. Here, all were cleanly, industrious and happy. The two Misses Fox, who superintend some of the departments, were clad in silks, probably of their own manufacture, and were as neat and genteel in their appearance and as easy and polite in their manners, besides being far more intelligent than our city belles, who sit prinked up in the drawing-room, and do nothing but read novels and receive the attention of monkey-headed dandies.

SANFORD HOWARD.

ZANESVILLE, O., JAN. 28, 1842.

Origin and Classificaton of the Soils.

BY DARIUS LAPHAM, *Civil Engineer.*

The rocky strata and earthy deposits on the surface of the earth, are always found in a certain invariable order of super-position. They are arranged by geologists into five series or classes, as follows:

1st series, Primitive.
2nd series, Transition.
3rd series, Lower Secondary.
4th series, Upper Secondary.
5th series, Tertiary.

Each of these series or classes are again subdivided, by Professor Amos Eaton, of Troy, New York, into three distinct formations, namely: 1. Carboniferous, 2. Quartzose, 3. Calcareous.

The first subdivision, embraces such rocks as contain coal or carboniferous matter; the second, those rocks of a sandy or quartzose character, the third embraces the lime stone or calcareous rocks. It appears therefore that there are *five general depsites* of *lime stone rock* or *calcareous formations.* By the investigations and discoveries made by geologists, it is proven most clearly, that upon the surface of each successive calcareous formation, various races, both of plants and animals, have lived and died; and they have left the impression of their forms, and the records of their existence and destruction, indelibly engraved upon the ever enduring rocks.

Brongniart recognizes four periods of the creation and distruction of the vegetable kingdom.

First Period. Consisted of orborescent forests of the Equisetum and Filices, (Rushes and Ferns) much larger than those of the present day;—also large plants, (somewhat resembling Pine, Hemlock and Cedar trees,) called Lepidendron. These plants are found in the Transition class, and correspond to the coal beds of Rhode Island, &c.

Second Period. Consisted of a number of small ferns, and very singular Coniferæ. These are found in the Lower Secondary class, and form the thin seams of coal in the carboniferous formation of that series.

Third Period. Consisted of an immense quantity of Ferns, and still greater masses of Cycadæ, the latter being more or less arborescent or dendritical. They combine the characters of the Palms and Ferns. These plants are found in the Upper Secondary class, and form the great coal beds of Pennsylvania, Ohio, &c. as also the coal measures of Europe.

Fourth Period. Consisted of plants resembling those of the present day.—They occur in the Tertiary class. They consist for the most part of pine, cedar, or cypress, and may be dug up hundreds of miles distant from any living trees of similar species.

Thus we find the series of Primitive rocks (formed before plants or animals were created) terminated by the *granular limerock* and in the *argillite slate rock*, which rests immedately upon this limerock, we first discover the remains of animals, (principally inhabitants of water) and in it also we discover the first coal deposites, and vegetable impressions.—The anthracite coal beds in Rhode Island, Massachusetts, and New York, are situated in the argillite slate rock, the lowest of the Transition series.

The 2nd or Transition series is terminated by the *metaliferious limerock*; resting upon this rock is *secondgray wacke slate*, containing thin seams of coal and impressions of vegetabes, with new races of animals.

The 3rd series, or Lower Secondary, is termiated by a colcareous stratum, called *corniferous* or *ceratial* limerock;* resting upon this limerock is the stratum of *third-graywacke slate*, which contains the great coal beds of Pennsylvania, Kentucky, Ohio, Indiana, Illinois, &c.

*This lime rock is found in the western part of the State of Ohio, and in the eastern part of the state of Indiana, the northern part of Kentucky, &c. There are two varieties. The "blue lime stone" and the "cliff lime stone" of Dr. Locke. It is distinguished by the remains of the *cyathophyllum* "stone horns."

The 4th Series or Upper Secondary, is terminated by a calcareous deposite called *oolitic rocks;* it embraces the green sand formation of New Jersey, the chalk of Europe, and a species of silicious limestone on the western ridges of the Allegany.

The 5th or Tertiary series embraces the earthy deposites that are distributed over the surface of the earth, and covering nearly all the rocky strata. The uppermost or latest formation, is *shell marl*, which occurs in insulated, or continued layers, fields or patches, in almost every part of the earth. It generally reposes upon marine sand, or crag in all bottom grounds. It consists chiefly of broken, pulverized, and entire shells of the genus *helix* or snail family. *Calcareous tufa* is often found in beds in the shell marl containing impressions of various plants called *lichens.*

We discover, therefore, a very intimate connection between the *lime stone deposites* and the *vegetable kingdom*, not only by these unequivocal geological records, but likewise by chemical analysis, which informs us that *lime*, to some extent enters into the tissue of every known plant. Our daily observation and experience also show that the districts of country situated on lime stone formations are the most fertile and productive.

Until recently, geologists have considered that soils were derived from the disintegration of the underlying or adjacent rocks. Schoolcraft first attempted to correct this notion; and professor Eaton, has given the following classification and description, of the detritus covering the surface of the earth. He arranges this class into eight distinct deposites, as follows: 1. *Plastic Clay.* 2. *Marly Clay.* 3. *Marine Sand* and *Crag.* 4. *Shell Marl.* 5. *Diluvion.* 6. *Ultimate Diluvion.* 7. *Post Diluvion.* 8. *Analluvion.*

The general characters of each are described as follows:

1. *Plastic Clay.* Generally called Potter's clay; does not efferverse with acids. When white it is called pipe clay; is not very extensive, and seldom appears at the surface, except when exposed in the sides of banks. Without any intermixture, it would bake in the dry season, and be running mortar in rainy weather. If mixed with marine sand, it would be tolerably productive. Wheat is liable to be winter-killed in it more than in any other soil.

2. *Marly Clay.* Overlays the plastic clay. Efferverses with strong acids. This stratum is almost universal. It is found in every part of the earth where it is sought in situations where it is not subject to be washed away. It always, probably, contains muriate of lime. Seldom contains organic remains. Bog iron ore, and iron stone, are found in it.

Alone it bakes in a drought, and is mortar in a wet season. Wheat winter kills in it. It generally contains 15 to 20 per cent. of carbonate of lime, and considerable muriate of lime. Wells dug in it afford "hard water." on account of the muriate of lime. These salts, [operating upon the humus which it contains,] gives it richness. Therefore if it is duly mixed with marine sand (which generally overlays it) it forms a rich and very durable soil.*

3. *Marine Sand* and *Crag.* The *sand* consists of fine grains of quartz, not united by adhesion or cement, but in loose masses, which may mostly be poured. The *crag* consists of pebbles, clay and loam, either united by carbonate of lime, or iron cement, as *pudding stone*, by clay and iron cement, as *hard paw;* or not united being merely *stratified gravel;* or united by adhesion, forming *arenaceous concretions.* Alone it is a meagre soil. But makes on excellent soil, when mixed with the marly clay.†

4. *Shell Marl.* Generally reposes on marine sand or crag in all bottom grounds. It occurs in fields or patches, in almost every part of the earth. When alone it is not very productive, especially in a dry season; but being made up of fragments of shells or minute species, it is always in a state suited to its application as a manure; and when applied to any other soil particularly where clay predominates, it improves their productiveness, [especially when putrescent manure, or vegetable matter is applied to the soil at the same time.]

All the foregoing deposites are supposed to be anti-diluvial.

5. *Diluvion.* Consists of deposites made by the deluge. It is heterogenous in its character, and is made up of all or most of the preceding deposites. In general it is very rich in vegetable matter; but it is often too loose, and requires an artificial intermixture of clay. It frequently affords localities of vegetable

* This is the stratum through which the tunnel at North Bend is cut.

† The extensive sand and gravel ridges and plains along the edges of the valleys of the Western rivers, lying above the reach of the floods of the rivers, consist of this material.

mould [swamp muck and peat bogs] which may be advantageously carted upon other soils. *

6. *Ultimate Diluvion.* This occurs in all ancient elevated forests, and wherever the surface has not been washed away. In most cultivated grounds it has been mixed with the underlying soils. In its undisturbed state, it is the soil to which the word *loam* is most properly applied. It seems to have been deposited towards the close of the deluge, when the water had become calm, and formed a universal mantle, covering the earth in the first ages after the deluge. Alone it is a durable and rich soil, excepting where sand predominates. Mixed with other earths it is always useful. [This stratum is from 5 to 7 feet thick on the summit of the hills in this county, and forms an excellent soil for wheat and grass.]

7. *Post Diluvion.* Deposites made since the deluge, along the margin of rivers and streams. Works of art are found in this formation. It is a curious fact that no works of art are found in diluvion. Near the sources of waters which deposited this soil, it is always coarse and almost destitute of fertility—remote from these sources it is fine and rich—midway between these extremities it is middling in its character. From the nature of its origin it is exceedingly variable—every locality depending upon the character of the deposites from which the waters flowed.

8. *Analluvion.* This is the soil formed by the disintegration of the exposed surface of all rocks, and remains on or near the place of disintegration. It is *argillacious* when fine and adhesive. *Granulated*, when in coarse grains or friable. The character of the soil thus made depends on the character of the underlying rocks.

For the Western Farmer and Gardener.

Notes on the Agriculture, &c., of the County of Licking.

(*Continued.*)

In the vicinity of Newark, I met with several specimens of what is called the Leicester breed of swine. For myself, I do not esteem this breed as highly as many do. The tendency to fatten in some of them is considerable, I admit, and they are quite large—but there is in nearly all I have seen, a looseness in the construction of their frames, a disproportion of parts and want of symmetry, which is incompatible with good constitutions and a faculty of making good flesh with the least expense. In justice, however, I cannot omit to mention a boar of this breed belonging to Mr. Franklin Halliday, of Newark. This animal, though not quite all that can be desired in symmetry, is certainly about equal in this respect to any hog I have seen of so large a size. If well fattened he would probably weigh 700 pounds, and I have never seen more than one or two Berkshire boars of that size, that were as good as he is.

Mr. George Baker has a beautiful farm, lying within a mile of Newark. His buildings are of the first class—his implements are of the most improved and approved kinds—his fences are in good order, and his farm is well divided and neatly managed. Mr. Baker is very spirited in the improvement of stock. He is now the owner of the old bull Duroc, (before mentioned as having been introduced here by Gen. Wilson,) and has several cows of that stock. He has expended much money in the purchase of Berkshire hogs, and has some fine ones. He has also some very pretty South Down sheep.

Granville, six miles west of Newark, was originally settled by a colony from the states of Massachusetts and Connecticut. The township, if I recollect rightly is six miles square. It has been for some time a place of considerable note, on account of its schools and literary institutions. There are no less than three schools or seminaries for the instruction of young ladies in the higher branches of learning—viz: the Presbyterian, (which is the largest of all,) the Baptist and the Episcopalian. In addition to these, there is a college for the classical education of young men, under the supervision of the Baptists.

The general character of the inhabitants, partakes strongly of that of the people from which they sprung. They practice the same untiring industry, and exhibit the same ardent desire for the education of the rising generation. The land is laid off in small farms—seldom containing more than two hundred acres—subdivided into medium sized lots—well fenced—in some instances stone walls being used—and the cultivation is usually much more thorough, and the general management far more neat, than is com-

* In Logan and Champaign counties numerous beds of peat bogs, &c., occur, and also of the *shell marl*.

monly met with in the west. Seldom do we find more pleasing examples of rural life, than are to be met with in this neighborhood.

One of the first objects of attention with the inhabitants was the cultivation of fruits. A good orchard is to be seen on almost every farm, and such fruits as are well adapted to the soil and climate are quite plenty.

Some of the most profitable farms I have met with, are in this township. In regard to one or two of them I regret that I have not some more particular and statistical information.

One of the best conducted farms I have anywhere seen, is that of Mr. Joseph Fassett. Mr. F. is a fine specimen of that sturdy class of yeomanry, which Goldsmith has well said, are

"——a country's pride."

His farm consists of only 100 acres; but every thing is here done *right*, from the cutting down of the forest, the division and improvement of the land, to the breeding and management of all the domestic animals.

All operations are based on *system*. A walk over this farm in the season of growing crops, or at the time of their maturity, is indeed truly gratifying. No pernicious or useless thing is permitted to grow. The grass and pasture lands are covered with a smooth rich sward—the cultivated crops are all clean and fully occupy the ground—in fact, in a field of corn of 25 acres, there did not seem to be a hill but what had exactly the right number of stalks in it—and I believe my hat would have held all the weeds in the lot. Mr. F. was one of the first who introduced here, from Kentucky and the Scioto valley, some cattle of the Patton stock and some decended from that known as the importation of 1817. His stock of hogs is equal to any I have any where met with. He has long been noted in this line—so much so that his neighbors say he has not had a poor pig for twenty years. Those he now has are a cross between the Berkshire and a stock he had before the Berkshires were introduced, which some called Bedford, and some Byfield. I will give some demonstrations of their qualities as shown by "*avoirdupois*," as Mr. Stephenson of the Kentucky Farmer says.

In 1840 he killed four pigs, precisely ten months and six days old, whose average dressed weight, was 334 pounds, the largest weighed 350 pounds. These were three-fourths Berkshire. In 1841, he had three litters from the 27th of March to the 2d of April. Two of these litters came from sows of the same litter with the pigs whose weights are just mentioned, and the other litter from the mother of these. Of the three litters he raised 22—and 22 such pigs I never before saw together, bred on one farm. Some of them he sold as breeders, and the others, I suppose he has by this time killed. I have only heard the weight of one, which killed at nine months and ten days old, weighed 306 pounds. Had they all been fed as well as those that were killed, I have no doubt they would have averaged 250 pounds at eight months old. They were all sired by a Berkshire boar.

There are some large dairies in this neighborhood, which can boast of as good butter and cheese, probably, as is made in the western country. Mr. Follett keeps from 90 to 100 cows—has made this year upwards of eleven tons of cheese. He makes new milk cheese altogether—finds it *bad economy*, (mark that, ye penny-wise white oak cheese makers,) to skim the milk any. He "runs up the curd" and makes the cheese immediately after milking. In years past, he has got from 8 to 12½ cents per pound for his cheese, sold at home, or the nearest markets. The last season, he loaded a boat with his cheese and the carcases of 100 hogs, fattened on the waste of the dairy, and took it through the canal down the Ohio and Mississippi for a market; at what prices he sold I have not learned. He makes three kinds of cheese—the common formed "hoop" cheese—the "Pine Apple" and "Brandied," or "Jar" cheese. The latter is made, or cured in jars. The peculiar method of manufacturing each kind, was obligingly given me, but the present is not a favorable opportunity of submitting the details to the public. Each is first-rate in its kind—but a specimen of the Brandied kind was equal, if not superior, to any I have ever seen. The Pine Apple and Brandied kinds, usually bring 18¾ cents per pound. Mr. F., I am told, has found the business of dairying very profitable. Of this I have no doubt, fully believing, that where circumstances are favorable, no description of farming will yield a better return for labor and capital. He raised last year two thousand bushels of sugar beets, for the purpose of feeding his cows, this winter. From previous use of this vegetable to some extent, he has a very favorable opinion of its value

for cows, and thinks its cultivation more profitable for this purpose than that of any other root. Mr. F. began at first with the common stock of the country, and afterwards crossed with the bull Duroc, (before mentioned) and is now using a bull (*Rhoderick Dhu*) bred by Dr. Watts, of Chillicothe, that came from his cow *Lady Flora*, by imported *Duke of York*. He thinks the cross by Duroc, an improvement in dairy qualities. The others are not yet old enough to have been proved.

Mr. Benjamin Lane, has a dairy, which though smaller than Mr. Follett's, comprising only twenty-five cows, has been made profitable, and better butter and cheese than I ate at his table, an epicure need not desire. The appearance of Mr. Lane's farm, his buildings, stock, &c., entitle him to rank among the best farmers of the country. As regards stock, few men have effected so much improvement as he has done in proportion to his opportunities. He has paid more attention to dairy properties in his cattle than most breeders have done, and cows of a better appearance than his as milkers, are but seldom seen. Mr. L. has a good stock of hogs, and is now making a cross with the Berkshires. I could not help fearing, however that he was in some danger of splitting, as you say, "on the rock of enormous size." He observed that he wanted a breed that would readily come up to the weight of 6 or 700 pounds.

The cattle show and exhibition of agricultural products, was holden at Granville on the 20th of October last. The society or association under whose direction it was held, was formed only a few months before, and consequently had not an opportunity to collect much money to distribute in premiums or to make preparations for a large show. Considering the circumstances, it was probably all that could have been expected. By another year the influence of the society will have been more widely disseminated, and we may confidently anticipate an exhibition of increased interest.

Among the stock exhibited, the following were worthy of notice. A bull from the herd of the Hon. H. Clay of Kentucky, offered by H. Wolcott, Granville. One owned by D. Partridge, St. Albans, (by Duroc) bred by Judge Bannon, Newark. Several fine cows and heifers, (some of which were bred by Dr. Watts, Chillicothe,) offered by Gen. A. Munson and son. Also, by the same, an imported Berkshire boar which took the first premium—a good animal for a large one, and from which has sprung some of the best stock in the country.

A Saxony buck owned by H. C. Taylor, Granville, (see list of premiums herewith appended,) and bred by H. D. Grove, Hoosick, New York, was one of the best animals at the show. He sheared six pounds of wool (washed) at the last shearing—and is in every way an excellent animal of the kind.

Particularly remarkable among the swine, were a young boar offered by A. Aylesworth, a sow by Hiram Woods, (sold H. Blandy, Brownsville,) and a sow by C. L. Whiting (sold Isaac Dillon Zanesville,) all bred by Wm. Whiting of Lorain county, and by him sent to C. L. Whiting. They were all most beautifully formed animals, showing a more perfect *finish* than is scarcely ever found. Mr. C. L. W.'s sow pig, farrowed on the first of June, weighed at four months old, 140 pounds. It was taken from the dam at four weeks old, and never was full fed. The stock was originally from Mr. Bement, of Albany. Mr. C. L. W. also exhibited a full blooded Berkshire sow and eleven pigs (see premium list) which were deserving particular note. I have seen these pigs since the show, and eleven finer ones of one litter, I have never met with.

Mr. Swan offered two fat hogs—15 months old—half Berkshire and half Byfield—which were very fine, and uncommonly heavy in proportion to the bone. One of them was as nearly as exact in his proportion and as well calculated to carry weight as it seemed possible for a hog to be. They were variously estimated, at 450 to 500 pounds—dressed.

Mr. Joseph Fassett sent his 22 pigs before spoken of, which constituted a group not excelled if equalled by any thing in their line.

Mr. George Baker, Newark, sent several full blood Berkshire sows and quite a herd of pigs—among which were some very pretty ones.

The "lion" of the day was decidedly Mr. J. W. Brice's bull Northampton, which had just arrived from Albany.

An address was delivered to the society by the President, Dr. Humphrey, which was replete with good, sound, practical ideas. Dr. H. has kindly furnished me with a copy for publication in the Farmer, which shall be forwarded the first opportunity.

The Secretary has furnished me with

the following abstract showing the award of premiums, &c.

For the best Breeding Mare—premium to Joshua Stark.

For the best Bull—premium to Apollos Griffin.

2d best Bull—to David Partridge.

For the best Cow—Gen. Agustine Munson.

For the best Fatted Bullock—Thomas Chittenden.

For the best Yoke Working Oxen—Gen. Agustine Munson.

For the best Bull Calf—Col. Ziba Woods.

For the best Heifer Calf—George Baker, Newark.

For the best Buck (Saxony.)—Henry C. Taylor.

For the best Buck (Leicestershire) Gen. A. Munson.

Best breeding sow with Pigs (Berkshire)—C. L. Whiting.

Best Boar (Berkshire)—Adolphus Munson.

Best Harness—Henry R. Green.

Best lot of Butter—C. L. Whiting.

Premiums were also awarded to C. L. Whiting, for a fine specimen of apples, (Golden Pippins,) also to Mr. Wm. S. Wright for apples, (Greenings,) and to Mr. Wright for a fine sample of sweet potatoes. To Ziba Woods, for the best acre of corn, being 103 bushels. S. H.

For the Western Farmer and Gardener.

A New Work on Agriculture.

In the January No. of Silliman's Journal of Science, there is a favorable notice of a new publication, which will be a valuable acquisition to the farmers of the United States. It is entitled, "*Lectures on the Applications of Chemistry and Geology to Agriculture;* by James F. W. Johnston, Professor of Chemistry and Geology in the University of Durham. Published in New York by Wiley and Putnam. 12 mo. 1842. It is to be published in four parts. The first part only had been published. It consists of a series of lectures delivered before a society of practical agriculturists; and they are addressed, not to the philosopher, nor the student, but to the tiller of the soil himself. It is therefore compiled in the most familiar manner, without unnecessary technical terms, and none are used unless explained. The first part is devoted to a consideration of the organic elements and parts of plants, the properties of the elementry and compound bodies which enter into their substance, or contribute to their growth and nourishment; to the general structure and uses of the several parts of plants; their mode of growth, and the manner in which their food is absorbed and assimilated.

The second part, which will soon be published, is to be devoted to the inorganic elements of plants and to the study of the soils from which they are derived; the constitution, origin, and methods of improving soils in different districts, and under unlike conditions; with the general relations of geology to agriculture.

The third part will be devoted to the nature of manures, their mode of action &c.

The fourth, and last, to the results of vegetation, the nature, constitution, and nutritive properties of different kinds of produce, especially in reference to their several equivalents or powers of supporting animal life; the feeding of cattle, the making of cheese &c.; the constitution and differences of various kinds of wood, and the circumstances which favor their growth.

The author has enclosed a large field; and if he has cultivated it according to the recent and most improved principles; it is to be hoped that his readers will reap a rich harvest from his labors.

With the importance of his subject, he feels fully impressed. He says:

"That art on which a thousand millions of men are dependent for their very sustenance—in the prosecution of which nine-tenths of the fixed capital of all civilized nations is embarked—and probably two hundred millions of men expend their daily toil—that art must confessedly be the most important of all; the parent and precursor of all other arts. In every country then, and at every period, the investigation of the principles on which the rational practice of this art is founded, ought to have commanded the principal attention of the greatest minds. To what other object could they have been more beneficially directed? But there are periods in the history of every country when the study of agriculture becomes more urgent, and in that country acquires a vastly superior importance. When a tract of land is thinly peopled, like the newly settled districts of North America, New Holland, or New Zealand, a very defective system of culture will produce food enough not only for the wants of the inhabitants, but for the partial supply of

other counties also. But when the population becomes more dense, the same imperfect or sluggish system will no longer suffice. The land must be better tilled, its special qualities and defects must be studied, and means must gradually be adopted for extracting the maximum produce from every portion susceptible of cultivation."

It is said that the soil of Great Britain has by improved management, been made to yield twice the quantity of food it afforded half a century ago; and the important question arises, whether the domestic supply may be expected still to increase in the same ratio with the population, or whether the demands of the latter will not soon overtake the productive powers of the land.

In Ohio the farmers are now about passing from the "imperfect and sluggish system," which merely provided for the wants of the inhabitants, to the "improved management," by which she will, like Great Britain, *double* the produce of her soil, and afford sufficient *surplus products* to feed the *surplus population* of Great Britain.

D. LAPHAM.

The Feeding &c. of a lot of Hogs.

Mr. EDITOR:

It is said by many that the good keeping and high feeding makes the fine animal, which all admit to be absolutely necessary in perfecting and rendering stock of any kind valuable, yet no fact is better established than that there are descriptions of stock that cannot by good keeping be made either fine or profitable. But the Western Farmer wants a hog that will require no *material* change in their treatment, or in other words a hog that will do well without extra feeding and attention: such a hog, I think we have almost to perfection.

Last season I fed a little upwards of 200 all of which were throughout kept together after the latter part of April and received the following treatment: They gleaned last winter after well fed cattle, and after cattle feeding ceased, which was in the latter part of April; they were let upon an inferior piece of clover which they soon grazed down short; they were then let upon timothy and blue grass, where they suffered considerably for water, and after the clover was somewhat reinstated they were returned to it, where they remained until harvest; they were then let upon a small quantity of small-grain in amount not more than 12 acres; in addition to which they had 80 barrels old corn by actual measurement, their whole keeping through summer, not being as good as that geneally bestowed by the best of Bourbon feeders, having suffered at one time for grass and at another for water, and also having far short the quantity of small grain usually fed to that number of hogs. At the usual time they were let into a field of corn where there was no water, having access to a pond 150 or 200 yards distant, and after a few days feeding the form and situation of the field was such that that they had to walk a half mile to drink and bathe themselves, and that at a time too when it was most important to have been otherwise to have increased in flesh, but which however may have improved their travelling qualities. With different keeping or rather a different manner of feeding, I am satisfied my hogs would have been considerably heavier. However on the 15th of Oct. I weighed 180 to James F. Stone of Bath Co., of which there were about 140 mixed Berkshires, half and three quarter bloods, at which time they ranged from 15 to 19 months old. I herewith give his certificate.

December, 31st, 1841.

This is to certify that I bought of E. M. Kennedy, 180 hogs that averaged 300 lbs. gross, of which there were said to be 140 mixed Berkshire hogs, which I drove to Prince Edward C. H. in Virginia. I have drove hogs for 10 years and never drove better travelling hogs in my life, nor hogs that held their own, or neated out better in market. I think the 140 would have averaged 350 lbs. when I started. My whole drove of 610 averaged 268 lbs. gross, and neated out in market 194½ lbs. I drove further in a day and gained upon every drove, to my knowledge, on the road. I passed several at Sweet Springs, reached Prince Edward seven or eight days before them. I should like to drive such hogs and no other next fall. Given *from* under my hand, the day and date above.

JAMES F. STONE.

The travelling qualities of the Berkshire can no longer be doubted, nor would they ever have been, if their form &c. had been duly considered, for experience testifies that an animal with *very* large bone, long joints and coupling coarse hair, &c., more frame than muscle never travels well, while at the same time these are the

marks of the gluttonous animal, and all who are informed on this hoggish subject know this is not the black Berkshire.—But above all, the Berkshire is better adapted it seems to the lavish manner of Kentucky feeding than any other hog in the country, as it has been ascertained by a scientific farmer, alias *Dr. Samuel D. Martin*, that the Berkshire wont *founder*,—important consideration! Known to be a "fact" by actual experiment and which "fact" is entitled to more weight from the "fact"of the Dr.'s hostility to the Berkshire. Now is it not a fact that a *hog* never founders only on a change from destitution to plenty, or from starvation to a feast. Out of 100 men including the Dr., 99 will say yes: But in the above experiment, the prolific *mother* of "facts," one of the litter is that Patience, one of the choice hogs of the stock of the best adaptation to Kentucky feeding, when fed with half allowance in the evening, full rations the next day, which was 5 pounds of corn, on being increased afterwards, half a pound per day, I suppose one fourth of a pound morning and night, she founders, is lame, sick. Strange conception this! And cruel was the Dr. in thus experimenting upon and making sick a delicate and fastideous Woburn *Sow*.

Now, dear Doctor, excuse me and the unholy combination to *write down* these only *writtenup* hogs, and badly done at that although sustained by "facts." At present, the sympathy for hogs seems to be very sensitive even in the breast of the most hardened. And when I imagine that I see several hundred of the Dr.'s dyspeptic Woburns just entering a 20 acre roasting-ear patch; I find myself involuntarily congratulating them upon their good fortune in falling into the hands of a man skilled in the science of medicine. He that would not, must be destitute of "fellow feeling" and incapable of appreciating "facts."

ELI M. KENNEDY.

Facts worth being known.

Dr. J. T. Plummer of Richmond Ia., has a notice in Sillman's Journal for January 1842, on the *Combustibility of Wood Ashes*. Two instances of the ignition of the wooden vessels containg ashes, under peculiar circumstances, led him to investigate the cause. The result was:

1. That wood ashes contain a considerable quantity of finely divided coal.

2. That the ashes may be sufficiently hot to ignite this coal, without their being at a red heat.

3. That the progress of this ignition is slow; and the combustion may extend throughuout a large mass of ashes, without warning, until it reach some inflamable material.

4. That it is not safe to deposite hot ashes even in the middle of the largest bulk of cold ashes; for although the fresh ashes, may not rest against the wood, and may appear securely remote from it, yet it is surrounded by, and reposes upon combustible materials, which may conduct the invisible fire, as in these two instances, to inflamable bodies around, and the box and building be involved in sheets of flame. D. L.

Recipe for Curing Beef or Pork.

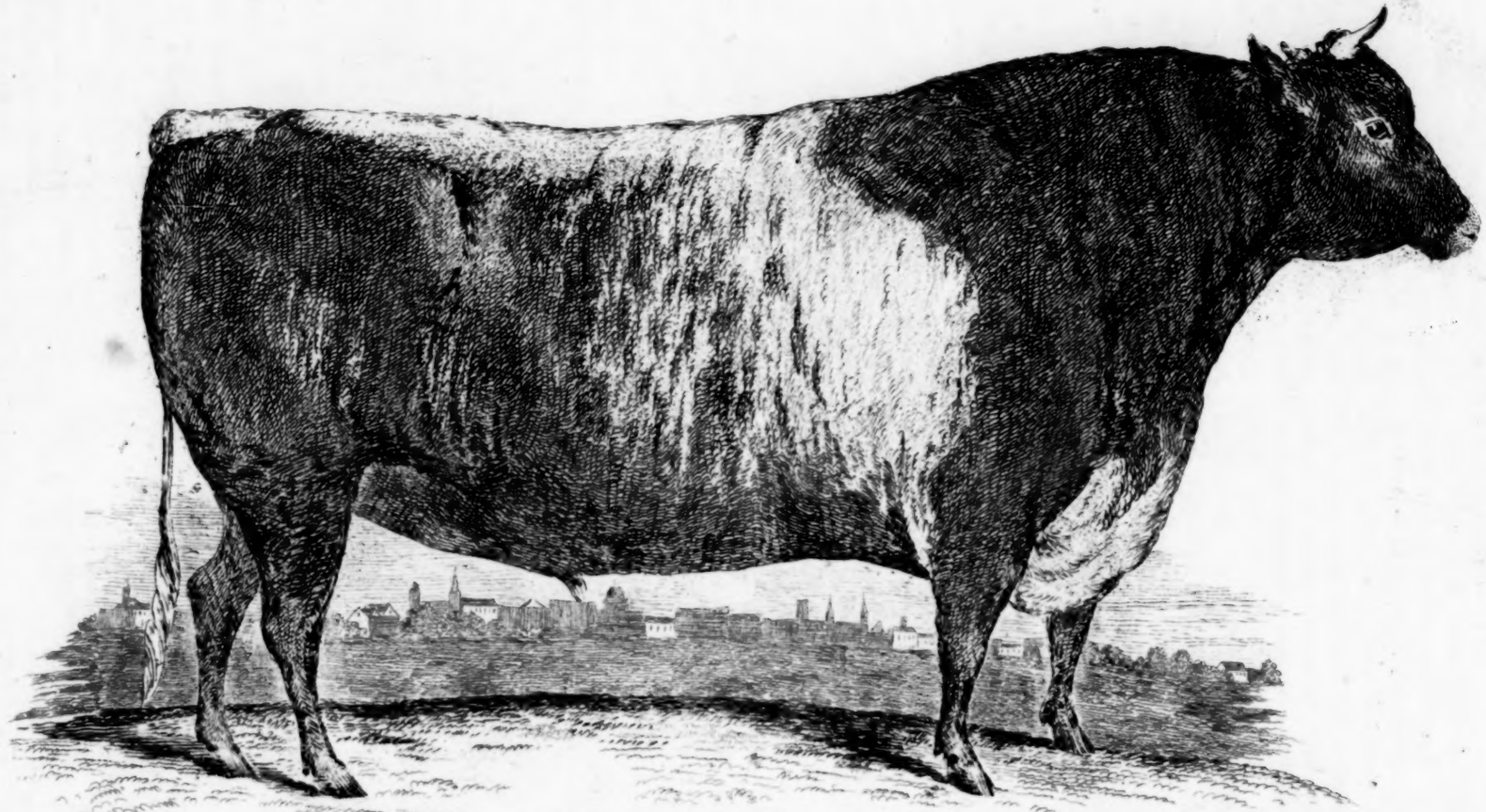
To one gallon of water, take one and a half lb. salt, one half lb. sugar, one half oz. saltpetre.

In this ratio the pickle to be increased to any quantity desired.

Let these be boiled together until all the dirt from the salt and sugar, (which will not be a little.) rises to the top and is skimmed off. Then throw it into a large tub to cool, and when *perfectly cold*, pour it over your beef or pork, to remain the usual time, say four or five weeks. The meat must be well covered with the pickle, and should not be put down for at least two days after killing, during which time it should be slightly sprinkled with powdered saltpetre.

Cincinnati Prices of Produce.

FLOUR—per Barrel	$4.87 *a* 5.00
WHISKEY—per gallon,	14 *a* 15
BEEF—Mess per barrel,	*a* 8.00
Prime, do	*a* 5.00
Dried, per lb.	5½ *a* 6
Tongues per doz.	5.00 *a* 6.00
PORK—Mess, per barrel,	6.50 *a* 7.00
Clear, do do	7.50 *a* 8.00
Prime, do do	5.00 *a* 5.50
Rump and Chine per bl.	4.00 *a* 5.50
Joles, per bl.	3.00 *a* 3.50
Hog round per lb.	1¾ *a* 2¼
Joles do do	1 *a*
Shoulders do do	1 *a* 1¼
Sides do do	2 *a* 2¾
Hams do do	3 *a* 4
BACON—Hog round do do	2⅝ *a* 3
Joles do do	1 *a* 1¼
Shoulders do do	1¼ *a* 2
Sides do do	2½ *a* 3
Hams do do	3 *a* 4¼
Canvass Hams	5 *a* 5½
Sugar cured and Extra	8 *a* 10
LARD—per pound	4 *a* 5
WHEAT—per Bushel	90 *a* 95
CORN IN EAR— do	20 *a* 25
do MEAL do	25 *a* 37
OATS— per bush	20 *a* 25
FLAX SEED— do do	87 *a* 90
do OIL— per gal.	85 *a* 90
POTATOES— per bush	31 *a* 37
BEANS—white do	37 *a* 50



RED JACKET

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